

Appalachian Plant Materials Center

2008 Summer Newsletter

Issue Contents:

- 1. Panbowl' River Alder First Release for the Appalachian PMC
- Annual Land Judging Competition Held at the Plant Materials Center
- West Virginia National Guard Camp Dawson Native Grasses Project
- Native Plants for Kentucky Food Security Act Programs
- Canaan Valley Wildlife Refuge Ecotype Speckled Alder Project
- 4. Cherokee "Winterjon" Apple Propagation

Panbowl' River Alder First Release for the Appalachian PMC

The Appalachian PMC, in conjunction with the Pennsylvania Game Commission, announced the release of 'Panbowl' river alder for commercial production in 2007. River alder is a nitrogenfixing, thicket-forming shrub or small tree with dark, green foliage. It is native to the United States and is suitable for streambank stabilization because of its flexible stems and fibrous root system. River alder reaches mature height of 8-12 feet in 10 years. Seed is produced in small cones and pollen is contributed by birchlike catkins which bloom in mid-to late March. 'Panbowl' is the first plant material to be released from the Appalachian PMC for commercial production. This cultivar was selected as superior from a collection of 45 accessions across 13 states. 'Panbowl' is named for its origins on the north side of Panbowl Lake in Jackson, Breathitt County, Kentucky.

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http://www.wv.nrcs.usda.gov/technical/ wvpmc.html

The Plant Materials Program Web site http://plant-materials.nrcs.usda.gov/



'Panbowl' river alder staminate and pistillate flowers

Appalachian Plant Materials Center products are

Helping People Help the Land

through better plants and science.

Annual Land Judging Competition Held at the Plant Materials Center

The Plant Materials Center was the host location for the Southern and Greenbrier Soil Conservation District sponsored Regional Land Judging competition again in 2007. This marks the eighth year that the PMC has hosted this annual competition.

Competitors are normally Future Farmer of America and Canon Envirothon students from middle and high schools from the seven counties comprising the two soil conservation districts. Students and coaches are given a brief tour of the center after they have completed their judging. The Plant Materials Center looks forward to hosting this competition in future years.



Regional Land Judging competition scene

West Virginia National Guard Camp Dawson Native Grasses Project

During 2004, the Natural Resources Staff at Camp Dawson, the Army National Guard Training Camp near Kingwood, West Virginia, entered into an agreement with the Appalachian PMC. The purpose of this agreement is for the PMC to produce local ecotype warm season grass seed for the Camp Dawson Natural Resources Staff to use in revegetating areas disturbed by annual training activities. Much of the training conducted at the camp involves earthmoving equipment, which inevitably leaves a lot of bare ground to be revegetated! Previous revegetation efforts have focused almost exclusively on use of introduced grasses and/or legumes which have often proven to be less than satisfactory aesthetic, wildlife and erosion control values. It is the desire of the Camp's Natural Resource Staff to increase use of locally adapted warm season grasses to improve the aesthetic, wildlife, and erosion control values of their revegetation efforts

Four warm season species are indigenous to the Camp. These species are: *Sorgastrum nutans*, Indiangrass; *Andropogon gerardii*, big bluestem; *Schizachyrium scoparium*, little bluestem; and *Panicum virgatum*, switchgrass. Seed from each of these species was collected at Camp Dawson in 2004 and 2005. These seeds were conditioned at the PMC and planted to establish seed production blocks at the PMC in 2006. Seed harvested from the PMC production fields will be returned to Camp Dawson to be used in revegetating areas disturbed by troop training exercises. All four species will also be evaluated at the PMC as potential Central Appalachian ecotype releases for use as forage and wildlife values.



Camp Dawson Ecotype Indiangrass

Native Plants for Kentucky Food Security Act Programs

The Kentucky Plant Materials Committee is going native! FSA contracts benefiting wildlife are abundant in Kentucky, while locally adapted native plants to use in these contracts are not. The Kentucky Plant Materials Committee approached the PMC for assistance with this dilemma in 2004. As a result, the PMC will be doing initial seed increase for five native species in 2005. These species are: *Liatris spicata*, Spiked Blazing Star; *Rudbeckia hirta*, Black-eyed Susan; *Desmanthus illinoensis*; Illinois bundleflower; *Lespedeza capitata*, Roundhead lespedeza; and *Lespedeza virginicus*, Virginia lespedeza. Seed produced by the PMC will be provided to Kentucky seed producers who will establish production fields and market seed of these species in Kentucky. All of these species are potential Kentucky ecotype releases.

Seedlings of each Kentucky ecotype were started in 2.25 inch diameter plug cells in 2005. These plugs were transplanted into field production blocks in 2006. The first seed harvest from these production blocks was in the fall of 2007. Seed will be made available for field plantings in 2008.



Kentucky Ecotype Dense Blazing Star

Cherokee "Winterjon" Apple Propagation



Cherokee 'Winterjon' Apple

The Eastern Band of the Cherokee Nation requested plant materials assistance through the NRCS Liaison to the Cherokee Nation with development of propagation techniques for Malus spp., or apple, in late 2006. Tribal elders have prioritized black bear (*Ursus americanus*) habitat improvement on the reservation and targeted an indigenous apple to improve late fall and early winter bear food sources.

The Cherokee describe "Winterjon" apple as a small to medium sized very firm fruit that remains attached to the tree and retains its crispness well into the early winter months. They report that black bear have been observed seeking out these apple trees to feed on the fruit well into January and frequently February. These apple trees were once abundant throughout the reservation and black bear were also significantly more numerous.

In order to maintain genetic purity, *Malus spp*. is propagated by grafting. Scion wood was collected from "winterjon" trees identified by the Cherokee in late February 2007. This scion wood was grafted onto MM 9 rootstock obtained from commercial suppliers and planted in 3 gallon containers. Approximately 75% of the grafts were successful and 50 container grown trees were returned to Cherokee, North Carolina for field planting on the reservation in the spring of 2008. Performance of these trees will be monitored annually until they reach fruit bearing age and perhaps longer. Six of the "winterjon" apple trees were retained for monitoring at the PMC and to provide a future scion wood source.

Canaan Valley Wildlife Refuge Ecotype Speckled Alder Project

Canaan Valley National Wildlife Refuge, the nation's 500th, is located near Davis, WV at an altitude of approximately 3500 feet. The combination of altitude, wet soils, forests, shrub lands, and open expanses create a sub alpine landscape and provide a diversity of wildlife habitats. While not as readily visible as other birds, woodcock contribute to the diversity of avian species that inhabit the refuge.

USF&WS personnel at Canaan Valley Wildlife Refuge have secured funding for habitat enhancement projects within the refuge, with a primary focus on woodcock habitat. Personnel have also harvested seed from locally available *Alnus incana ssp. rugosa*, speckled alder, plants for use in producing seedlings for habitat restoration and enhancement within the refuge. However, USF&WS lack the personnel, facilities and expertise to produce seedlings for their woodcock habitat restoration and enhancement project.

Thus, US F &WS personnel opted to solicit PMC assistance with production of the speckled alder seedlings. The PMC agreed to produce approximately 1000 seedlings for the Canaan Valley Wildlife Refuge woodcock habitat enhancement program and proceeded to plant the speckled alder seeds provided by the US F&WS in the autumn of 2005. This project will continue through 2008.



Canaan Valley Ecotype Speckled Alder

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